REMARKS

Applicant has received the Office Action dated May 2, 2007, in which the Examiner: 1) rejected claims 1 and 15 as allegedly indefinite; 2) rejected claim 1 as allegedly directed to non-statutory subject matter; 3) rejected claims 15-18 as allegedly anticipated by Mikesell (U.S. Pub. No. 2004/0153479, hereinafter "Mikesell"); 4) rejected claims 8-14 and 19-25 as allegedly unpatentable over Cannon (U.S. Pat. No. 5,983,239, hereinafter "Cannon") in view of Mikesell; and 5) rejected claims 1-7 as allegedly unpatentable over Cannon in view of Howard (U.S. Pat. No. 6,519,612, hereinafter "Howard") and further in view of Mikesell.

With this Response, Applicant amends claims 1, 5-7 and 15, and cancels claim 4. Reconsideration is respectfully requested.

I.   SECTION 112 REJECTIONS

With this Response, Applicant amends claim 1 to remove the offending terminology, thus mooting the rejection. Moreover, Applicant amends claim 15 to address the rejection. No new matter is added.

II.   SECTION 101 REJECTIONS

The Office action rejects claim 1 as allegedly directed to non-statutory subject matter. Applicant amends claim 1 as suggested by the Office action to address the rejection.

III.   ART-BASED REJECTIONS

A.   Claim 1

Claim 1 stands rejected as allegedly obvious over Cannon, Howard and Mikesell. Applicant amends claim 1 to more fully address the allegedly non-statutory nature of the claim, and not to define over the cited art.

Cannon is directed to a storage management system with file aggregation supporting multiple aggregated file counterparts. (Cannon Title). In particular, Cannon discusses the existence of processing overhead associated with a file in a system, and that for smaller files the processing overhead is a predominant factor in accessing the smaller files.

> The storage of each file requires both media preparation overhead and bookkeeping overhead, delaying completion of the entire storage process. The overhead for storage of a file is independent of

that file's size. Thus, the overhead for a large file is overshadowed by its more substantial I/O time. The opposite is true with small files, where the necessary overhead dominates the file storage process compared to the file's relatively short I/O time. Consequently, I/O time is the chief obstacle in speedier storage of large files, whereas overhead prevents small files from being stored faster.

(Cannon Col. 1, line 65 through Col. 2, line 7). In order to decrease the effect of the processing overhead associated with each access to a file, Cannon discloses a data storage subsystem 102 that performs services for client stations 106 (*e.g.,* archive and backup) where user files are aggregated into managed files.

One of the key features of the present invention is storage and use of **"managed" files, each comprising an aggregation of one or multiple constituent "user" files.** The "user" files are created by the client stations 106, and managed by the subsystem 102 as a service to the client stations 106. ... This "internal" management scheme [of the subsystem 102] helps to significantly reduce file management overhead costs by using managed files constructed as aggregations of many different user files. In particular, **the subsystem 102 treats each managed file as a single file during backup, move, and other subsystem operations, reducing the file management overhead to that of a single file.**

(Cannon Col. 7, lines 54-67 (emphasis added)). Cannon discloses tables that track the membership of various user files in a managed file; however, the user files are consistently identified by the name assigned by client stations 106. (Cannon Col. 8, lines 29 through Col. 9, line 11; Table 1 (note "user file name" column); Table 3 (note "user file name" column)).

Howard is directed to an internet storage and manipulation system. (Howard Title). In particular, Howard discloses a system where the original file system and namespace remains intact, and the Howard system provides a parallel system for organizing and accessing the files.

The end user may continue to use the file storage system in the same fashion to which they have become accustomed. In addition, application programs may continue to use the file storage system without modification. **However, various components of the virtual directory and navigation system can seamlessly link with the operating system of the computer to provide a parallel method for organizing, accessing and maintaining the computer system's storage.**

(Howard, Col 3, line 67 through Col. 4, lines 8 (emphasis added)). Thus, the files are stored in the original file system and namespace, and Howard merely provides a different mechanism to identify the files.

The Manual of Patent Examining Procedures (MPEP) provides guidance as to the propriety of considering references together. In particular, the MPEP admonishes that:

> THE PROPOSED MODIFICATION CANNOT CHANGE THE
> PRINCIPLE OF OPERATION OF A REFERENCE
>
> If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.

(MPEP 8th Ed., Rev. 3, August 2005, § 2143.01(VI), p. 2100-138 (emphasis original)).

In Cannon, the files are consistently tracked by their user file name, even when aggregated. Howard expressly states that the file system namespace and file structure remain unchanged, for user convenience and backward compatibility. Howard provides only a parallel method to organize and find the files. If it is hypothetically assumed that Mikesell teaches storing in a different namespace and file structure (which Applicant does not admit), modifying Cannon and/or Howard to operate in a different namespace and file structure changes the principle of operation of Cannon and Howard. Cannon expressly tracks aggregated files by the user file names. Howard expressly teaches that the namespace and file structure should remain unchanged. To modify Cannon/Howard to use a different namespace and/or file structure at the storage level changes completely the principle of operation. For this reason alone the rejections should be withdrawn.

Further still, the MPEP admonishes:

> THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR
> ART UNSATISFACTORY FOR ITS INTENDED PURPOSE
>
> If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

(MPEP 8th Ed., Rev. 3, August 2005, § 2143.01(V), p. 2100-137). Here again, Howard expressly states that the file system namespace and file structure remain unchanged (*e.g.*, to ensure backward compatibility). To modify Cannon/Howard in view of the alleged teaching of Mikesell to change the file system namespace and/or file structure would render Howard unsatisfactory for its intended purpose, and thus there is no motivation to make the proposed modification. For this additional reason the rejection should be withdrawn.

Based on the foregoing, Applicant respectfully submits that claim 1, and all claims which depend from claim 1 (claims 2-7), should be allowed. Applicant amends claims 5-7 to account for the cancellation of claim 4, and not to define over any cited art.

B.   Claim 2

Claim 2 stands rejected as allegedly obvious over Cannon, Howard and Mikesell.

Claim 2 specifically recites, "wherein when the processor creates metadata the program further causes the processor to receive from at least one of the user or a system administrator a desired access speed for the file." The Office action cites Cannon claim 9 for this teaching. However, claim 5 of Cannon is directed to restoring of files. Claim 9 further limits claim 9 by indicating that the predetermined criteria for selecting a location from which to restore is based on access of the devices storing the files. Even if it is hypothetically assumed that the teachings of Howard and Mikesell are precisely as the Office action suggests (which Applicant does not admit), Cannon, Howard and Mikesell still fail to teach or suggest "wherein when the processor creates metadata the program further causes the processor **to receive from at least one of the user or a system administrator a desired access speed for the file.**"

Claim 2 is allowable for at least the same reasons as claim 1, as well as for the additional limitations therein.

C.   Claim 3

Claim 3 stands rejected as allegedly obvious over Cannon, Howard and Mikesell.

Claim 3 specifically recites, "wherein when the processor creates metadata the program further causes the processor to receive from at least one of the user or a system administrator a desired reliability for the file." The Office cites Cannon: Col. 8, lines 45-48 (a general discussion of an inventory table that does not mention desired reliability); Col. 12, line 60 to Col. 13, line 40 (a discussion of whether predetermined criteria are met to perform a file aggregation, with no discussion of a user or administrator providing a desired reliability); and claim 5, second limitation (which reads, "utilizing the mapping table to identify a user file [where a file to be restored is held] occupying a predetermined position in the first managed file," the relevance of which is unknown). Thus, even if it is hypothetically assumed that the teachings of Howard and Mikesell are precisely as the Office action suggests (which Applicant does not admit), Cannon, Howard and Mikesell still fail to teach or suggest "wherein when the processor creates metadata the program further causes the processor to **receive from at least one of the user or a system administrator a desired reliability for the file.**"

Claim 3 is allowable for at least the same reasons as claim 1, as well as for the additional limitations therein.

D.   Claim 6

Claim 6 stands rejected as allegedly obvious over Cannon, Howard and Mikesell.

Claim 6 specifically recites, "wherein the program further causes the processor to delete the file after an expiration of a period of time indicated in the metadata." The location cited by the Office action clearly states, "In this operation, **the client station 106 requests** the subsystem 102 to delete an individual user file... ." (Cannon, Col. 15, lines 10-12). Thus, even if it is hypothetically assumed that the teachings of Howard and Mikesell are precisely as the Office action suggests (which Applicant does not admit), Cannon, Howard and Mikesell still fail to teach or suggest "wherein the program further causes the processor to delete the file **after an expiration of a period of time indicated in the metadata.**"

Claim 6 is allowable for at least the same reasons as claim 1, as well as for the additional limitations therein.

E.   Claim 8

Claim 8 stands rejected as allegedly obvious over Cannon and Mikesell.

Claim 8 specifically recites, "wherein the host computer communicates files to the server for storage on at least one of the plurality of storage devices, wherein the server appears to be a network storage device operating in a user name space and in a user file structure; and wherein the server selects on which of the plurality of storage devices to store the files on a file-by-file basis based on storage characteristic preferences supplied for each file, and wherein each file is stored under a globally unique name in a global namespace of the server." As discussed above, Cannon is specifically directed to aggregating files into managed files to reducing processing overhead. To modify Cannon to operate on a file-by-file basis changes entirely the principle of operation of Cannon, in complete contravention of the rule that "THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE." (MPEP 8th Ed., Rev. 3, August 2005, § 2143.01(VI), p. 2100-138). Thus, even if hypothetically the teachings of Mikesell are precisely as the Office action suggests (which Applicant does not admit), Cannon and Mikesell fail teach or suggest "wherein the server selects on which of the plurality of storage devices to store the files on a file-by-file basis based on storage characteristic preferences supplied for each file."

Based on the foregoing, Applicant respectfully submits that claim 8, and all claims which depend from claim 8 (claims 9-14), should be allowed.

F.   Claim 15

Claim 15 stands rejected as allegedly anticipated by Mikesell. Applicant amends claim 15 to address the Section 112 rejection, and not to define over any cited art.

Claim 15 specifically recites, "wherein the server stores the file on at least one of the first and second storage devices ... , the selection of the storage location made by the server based on ... storage preferences for the file." In the

various selections plucked from a range spanning 25 paragraphs of Mikesell, the Office action attempts to evidence anticipation of the above limitation; however, the citations fall short. The citations directed to "metadata about the file" fail to expressly or inherently teach storage preferences for the file. The citations from paragraphs [0089] speak of "policies set as default parameters," but again are not directed to storage preferences for the particular file. The citations directed paragraph [0096], [0098] and [0101] appear to be directed to making storage decisions based on the physical system, not the particular file. Thus, Mikesell fails to expressly or inherently teach "wherein the server stores the file on at least one of the first and second storage devices ... , the selection of the storage location made by the server based on ... storage preferences for the file."

Based on the foregoing, Applicant respectfully submits that claim 15, and all claims which depend from claim 15 (claims 16-18), should be allowed.

G.   Claim 19

Claim 19 stands rejected as allegedly obvious over Cannon and Mikesell.

Claim 19 specifically recites, "wherein the first means for executing communicates files to the second means for executing for storage on at least one of the plurality means for storing, wherein the second means for storing to be a network storage device operating in a file structure of the first means for executing; and wherein program executing on the second means executing selects on which of the plurality of means for storing to store the files on a file-by-file basis based on storage characteristic preferences supplied for each file, and wherein each file is stored under a globally unique name in a global namespace of the plurality of means for storing." In Cannon, the files are consistently tracked by their user file name, even when aggregated. If it is hypothetically assumed that Mikesell teaches storing in a different namespace and file structure (which Applicant does not admit), modifying Cannon to operate in a different namespace and file structure changes the principle of operation of Cannon. Cannon expressly tracks aggregated files by the user file names. To modify Cannon to use a different namespace and/or file structure at the storage level changes completely the principle of operation.

Based on the forgoing, Applicant respectfully submits that claim 19, and all claims which depend from claim 19 (claims 20-25), should be allowed.

IV.   CONCLUSION

In the course of the foregoing discussions, Applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicant respectfully requests reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

_____/Mark E. Scott/_____

Mark E. Scott

PTO Reg. No. 43,100

HEWLETT-PACKARD COMPANY   CONLEY ROSE, P.C.
Intellectual Property Administration   (512) 391-1900 (Phone)
Legal Dept., M/S 35   (512) 320-9181 (Fax)
P.O. Box 272400   ATTORNEY FOR APPLICANT
Fort Collins, CO 80527-2400